

# Defining the Problem and Evaluating

## Identify Initial Concern

- General description of problem
- Prioritize and select target behavior
- Describe what is known about problem and generate questions
  - Environment
  - Instruction
  - Curriculum
  - Learner
- Describe problem in observable and measurable terms – stranger test.

Note: This is the most difficult step of the model. It should be done collaboratively. However, if done correctly, solution ideas easily follow. The problem needs to be describe precisely, then formulate hypothesis, predictions, and referral questions.

## Characteristics of a Definition

- Concrete, observable terms where a stranger can determine if behavior has occurred.
- Measurable
- Specific – break things down into its smallest components
- Leads to interventions

## Procedures for Defining the Problem

- Select target behavior – teacher may have several concerns, prioritize according to significance of impact
- Define in concrete, observable, and measurable terms, everyone should agree
- Hypothesize an explanation for the problem based on the definition – consider modifiable factors – For example, John is off task because he is distracted by noises in the classroom.
  - Development of hypothesis
    - Hypotheses should be stated in the following manner – Tom's out of seat behavior in math because he lacks the computation skills necessary to complete the independent seatwork.
    - Hypotheses are generated in a type of brainstorming sessions.

- Five types of hypotheses
  - Curricular – Is curriculum appropriate for student? Consider sequence of objectives, teaching methods, and practice materials provided.
  - Instructional – manner in which teacher uses curriculum – consider instructional techniques, presentation style, questioning, feedback techniques.
  - Environment – how environment effects learning – arrangement of classroom, material, media equipment
  - Student skill – necessary prerequisite skills
  - Student process – capacity to learn and problem-solving techniques.
- Predict change in student behavior, use if/then wording – If classroom is quiet then Bill will not be distracted
- Develop assessment questions to be answered – questions stem from hypothesis and predictions – data collected supports or refutes hypothesis – consider setting, current level of performance, frequency, intensity, and duration of problem.

### Developing the Assessment Plan

- Develop assessment plan to answer questions generated and validate target behavior.
- Data across four domains should be gathered from multiple sources. (RIOT)
  - Reviews
  - Interviews
  - Observations
  - Tests
- Determine roles, responsibilities, and timeline.

### Assessment Plan

- Assessments must be functional.
  - Direct link between assessment and intervention.
  - Data is collected regarding skill deficits and/or performance deficits, academic and/or nonacademic behaviors.
  - Questions drive assessments.
  - Data leads to instructional decisions and goal setting.

- Characteristics of functional assessments
  - Relevance – Collect data directly related to problem, hypothesis, and questions – no standard comprehensive test battery.
  - Direct – Assessments are derived from curriculum, behaviors and environment observed in relevant settings.
  - Multi-dimensional – Data collected regarding environment, curriculum, instruction, and learner using RIOT.
  - Formative – Data is used to formulate interventions – Data pinpoints deficiencies and deficits – Data also identifies variable affecting student performance; such as environment, instruction, and curriculum.
  - Individually focused – Assessments focus on identifying individual's strengths and weaknesses and establishing a baseline.
  - Technically adequate – Reliable and valid for the intended purpose.
- Data collection
  - Environmental variables – class size, physical arrangement of classroom, equipment and materials, etc.
  - Instructional variables – behaviors and techniques used by teacher – questioning techniques, feedback, behavior management, prompts.
  - Curricular variables – pacing, sequence, scope, opportunities for practice, leveling of students.
  - Student variables – academic portfolio of student and consideration of a skill deficit or a performance deficit.
- RIOT
  - Review records and work samples, interview staff and parents, testing involves CBM.
  - Proceed from general to specific
    - Global – vision, hearing, environmental factors
    - Specific assessment aimed at answering assessment questions – specific strengths and weaknesses in academic portfolio – curricular, instructional, and environmental factors affecting performance

### Analysis the Assessment Plan

- Review data
- Calculate discrepancy between baseline and acceptable level of performance
- Baseline is median of three measures
- Indicate standard
- Make an informed statement as to why the problem is occurring
- Make a prediction regarding intervention
- Chart and set goal

## Prediction and Goal Setting

- Without goal setting, it is impossible to judge progress and determine effectiveness of intervention.
- Goal statements are based on baseline data.
- Goal statements are written in specific and measurable terms.
  - Goal Statements
    - Goal statements are a specific description of change you expect to see in student's behavior as a result of the intervention.
      - Includes behavior to change
      - Conditions that will bring about change
      - Level of behavior that is expected
    - Short-term goals describe progress student is expected to make in a short period of time – during an intervention phase
    - Long-term goals describe progress student is expected to make in a year – often associated with a program, sometimes with intervention phases
    - Program modification or exit goal statements identify requirements necessary for student to have a program adjusted or exit program.
    - Behavior needs to be measurable, observable, and specific – focus on increasing positive behaviors, rather than decreasing negative ones.
    - Conditions include – timeline, measurement situation, and measurement materials used – for behavioral issues conditions include – timeline, setting, environmental stimuli that will elicit behavior.
    - Level of behavior that is expected – several ways to establish this:
      - Norms/percentile cutoffs
      - Expectations
      - Realistic/ambitious growth
      - Growth rates
      - Minimum celeration
  - Computing Growth Rates
    - Winter Norm minus Fall Norm, divided by number of weeks between norming projects.
    - Gives you a growth expectancy for each week of school year.
    - Allows for obtaining student's baseline then monitoring progress while comparing to growth expectancy.